

What is claimed is:

1. An air conditioning system, comprising:

a first cooling device combining a heating function comprising a compressor, an outdoor heat exchanger carrying out heat exchange between a refrigerant and outdoor air, an indoor heat exchanger carrying out heat exchange between the refrigerant and indoor air, a passage control device alternatively guiding the refrigerant compressed in the compressor either to the outdoor heat exchanger or the indoor heat exchanger according to a driving mode and an expansion device provided between the outdoor heat exchanger and the indoor heat exchanger for expanding the refrigerant.;

a second cooling device comprising a blower forcibly sucking in and blowing outdoor air into an interior and a humidifying device provided at an outlet side of the blower for supplying moisture to outdoor air passing through the blower;

a humidity sensor measuring humidity of outdoor air; and

a control unit electrically connected to the first cooling device, the second cooling device and the humidity sensor, and alternatively driving either the first cooling device or the second cooling device according to outdoor air humidity transmitted from the humidity sensor in a cooling mode.

2. The air-conditioning system of claim 1, wherein the blower comprises an axial flow fan.
3. The air-conditioning system of claim 1, wherein the humidifying device comprises a cooling pad made of well-ventilated material and containing moisture.
4. The air-conditioning system of claim 3, wherein the cooling pad of the second cooling device comprises a plurality of holes through which air passes.
5. The air-conditioning system of claim 2, wherein the second cooling device further comprises a filter provided at a side of the humidifying device, for removing dirt in outdoor air.
6. The air-conditioning system of claim 3, wherein the second cooling device further comprises a filter provided at a side of the humidifying device, for removing dirt in outdoor air.
7. The air-conditioning system of claim 6, wherein the filter is provided between the blower and the cooling pad.

8. The air-conditioning system of claim 2, wherein the second cooling device further comprises a tank storing refrigerant.

9. The air-conditioning system of claim 8, wherein the second cooling device further comprises:

a pump pumping the refrigerant stored in the tank; and

a sprayer spraying the pumped refrigerant into the cooling pad.

10. The air-conditioning system of claim 8, wherein the tank is provided to cover a bottom of the cooling pad.

11. The air-conditioning system of claim 10, wherein the second cooling device further comprises:

a pump pumping refrigerant stored in the tank; and

a sprayer spraying pumped refrigerant into the cooling pad.

12. An air-conditioning system combining a heating function, comprising:

a first cooling device combining a heating function comprising a compressor, an outdoor heat exchanger carrying out heat exchange between a refrigerant and outdoor air, an indoor heat exchanger carrying out heat exchange between the refrigerant and indoor air, a passage control device alternatively guiding the refrigerant compressed in the compressor to the outdoor heat exchanger or the indoor heat exchanger according to a driving mode and an expansion device provided between the outdoor heat exchanger and the indoor heat exchanger for expanding the refrigerant;

a second cooling device comprising a blower forcibly sucking in and blowing outdoor air into an interior, a cooling pad provided at an outlet side of the blower and made of well-ventilated material containing refrigerant, a tank storing refrigerant, a pump pumping up refrigerant stored in the tank, a sprayer spraying the pumped refrigerant into the cooling pad, and a filter provided at a side of an outlet of the cooling pad and removing dirt contained in outdoor air;

a humidity sensor measuring humidity of outdoor air; and
a control unit electrically connected to the first cooling device, the second cooling device and the humidity sensor, and alternatively driving either the first cooling device or the second cooling device according to the outdoor air humidity transmitted from the humidity sensor in an air cooling mode.

13. The air-conditioning system of claim 12, wherein the filter is provided between the blower and the cooling pad.
14. The air-conditioning system of claim 12, wherein the tank is provided to cover the bottom of the cooling pad.
15. A driving method of an air conditioning system, comprising steps of:
 - measuring humidity of outdoor air at a humidity sensor when the power of the air conditioning system is on;
 - comparing humidity of outdoor air with predetermined humidity; and
 - operating a first cooling device circulating a refrigerant by using a compressor for cooling the interior when humidity of outdoor air is higher than predetermined humidity, and
 - operating a second cooling device sucking outdoor air with low relative humidity, increasing the relative humidity through humidifying and cooling process and providing the cooled air into the interior for cooling the interior when humidity of outdoor air is lower than predetermined humidity.

16. The driving method of the air-conditioning system of claim 15, further comprising a step of operating the second cooling device for a predetermined time to ventilate the interior after operating the first cooling device for a predetermined time in case that the first cooling device is operated first.

17. The driving method of the air-conditioning system of claim 16, further comprising a step of:

operating the first cooling device if a temperature of the interior is higher than a predetermined temperature after operating the second cooling device for a predetermined time, and

stopping the operation of the cooling system if the temperature of the interior is lower than the predetermined temperature after operating the second cooling device for a predetermined time.

18. The driving method of the air-conditioning system of claim 15, in case that the second cooling device is operated first, further comprising a step of:

operating the first cooling device if a temperature of the interior is higher than a predetermined temperature after operating the second cooling device for a predetermined time,
and

stopping the operation of the second cooling device if the temperature of the interior is lower than the predetermined temperature after operating the second cooling device for a predetermined time.

19. The driving method of the air-conditioning system of claim 18, further comprising a step of operating the second cooling device, before operating the second cooling device for the predetermined time.